

REMARKS

This Amendment is filed in response to the Office Action dated November 2, 2006, which has a shortened statutory period set to expire February 2, 2007.

SUMMARY OF CLAIMED SUBJECT MATTER

As taught by Applicants, various approaches can be used to make masks, where the more expensive mask design approaches tend to yield superior results. Specification, page 2, lines 9-10. A current technique for creating superior mask design involves phase-shifting. Specification, page 2, lines 10-11. Unfortunately, creating phase-shifted masks tends to be expensive. Specification, page 3, lines 4-5.

The nature of semiconductor manufacturing is that only a relatively low percentage of integrated circuits are market "hits". Specification, page 3, lines 6-7. Indeed, most integrated circuits make little or no profit, and frequently do not result in enough revenue to even cover the cost of manufacture. Specification, page 3, lines 7-9. Unfortunately, it is not possible to determine whether an integrated circuit is going to be profitable or not before the IC is commercially introduced. Specification, page 3, lines 16-17.

One way to minimize a loss associated with a potentially non-profitable IC is to forego the additional expense of using phase-shifting technology in its manufacture. Specification, page 3, lines 22-24. Consequently, phase-shifting technology may be under-utilized even though its adoption would, on average, yield greater profits and better ICs. Specification, page 4, lines 7-9.

According to one claimed technique, a facilitator provides, on behalf of a set of one or more parties that desire masks, subsidies for production of phase-shifted masks. Specification, page 5, lines 3-4. The manufacture of the phase-shifted masks is paid using compensation that includes the subsidies from the facilitator. Specification, page 5, lines 4-6. One or more mask makers manufacture the phase-shifted masks for the compensation. Specification, page 5, lines 6-7 and FIG. 3.

The facilitator receives, from the set of one or more parties, compensation for the subsidies based on one or more factors including a factor that reflects market success of integrated circuits produced using the phase-shifted masks. Specification, page 5, lines 8-9 and FIG. 4. As a result of using this technique, the various participants in the semiconductor industry benefit financially and at the same time the adoption of superior manufacturing techniques, i.e. phase-shifting, is accelerated. Specification, page 5, lines 15-17.

Applicants now provide herein a concise explanation of the subject matter defined in each independent claim (i.e. Claims 1, 28, and 53) and each dependent claim (i.e. Claims 2, 4-7, 11, 14, 19-20, 22-25, 29, 31-34, 38, 41, 46-47, 49-51, 54, 56-59, 63, 66, and 70) argued separately, referring to the Specification by page and line number and to the drawings where appropriate.

1. A method of manufacturing phase-shifted masks, the method comprising the steps of:

providing, from a facilitator on behalf of a set of one or more parties that desire masks, subsidies for production of

phase-shifted masks (Specification, page 5, lines 3-4; page 7, lines 11-15; page 10, lines 13-15) (FIG. 3, semiconductor manufacturers 302, facilitator 310; FIG. 4, semiconductor manufacturer 304, mask maker 314, reduced mask cost (1));

paying for manufacture of said phase-shifted masks using compensation that includes said subsidies from said facilitator (Specification, page 5, lines 4-6; page 7, lines 15-18; page 10, lines 19-20) (FIG. 4, total mask cost (2));

manufacturing said phase-shifted masks for said compensation, said manufacturing being performed by a set of one or more mask makers (Specification, page 5, lines 6-7; page 11, lines 1-2) (FIG. 3, mask makers 312; FIG. 4, mask maker 314, improved technology mask (4)); and

receiving, by said facilitator from said set of one or more parties, compensation for said subsidies based on one or more factors including a factor that reflects market success of integrated circuits produced using said phase-shifted masks (Specification, page 5, lines 7-9; page 9, lines 12-17; page 11, lines 2-6) (FIG. 3, facilitator 310, semiconductor manufacturers 302; FIG. 4, facilitator 310, semiconductor manufacturer 304, integrated circuits (%), 100% revenue (6), X% revenue (7)).

2. The method of Claim 1 wherein, for a particular party in said set of one or more parties,

the facilitator agrees to provide subsidies for production of phase-shifted masks for a defined population of designs (Specification, page 17, lines 5-21); and

the particular party agrees to compensate the facilitator for the subsidies based on a factor that reflects market success of each and every integrated circuit produced by or

for said particular party based on any design in said defined population of designs (**Specification, page 9, line 24 to page 10, line 2**).

4. The method of Claim 1 wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator based on number of integrated circuits manufactured using a phase-shifted mask that was subsidized by the facilitator (**Specification, page 9, line 24 to page 10, line 2**).

5. The method of Claim 1 wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator for rental of a phase-shifted mask that was subsidized by the facilitator (**Specification, page 9, lines 18-23**).

6. The method of Claim 1 wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator based on revenues derived from integrated circuits manufactured using a phase-shifted mask that was subsidized by the facilitator (**Specification, page 9, lines 14-17**).

7. The method of Claim 6 wherein the party pays the facilitator a per-unit amount that decreases with increased volume of sales of integrated circuits manufactured using said phase-shifted mask (**Specification, page 10, lines 3-8**).

11. The method of Claim 1 further comprising the step of the facilitator certifying mask makers that satisfy certain quality criteria (**Specification, page 11, line 13 to page 12, line 4**).

14. The method of Claim 13 further comprising the step of the facilitator determining which mask makers to certify based on said information (**Specification, page 11, line 13 to page 12, line 4**).

19. The method of Claim 1 further including the facilitator using a stepper simulation tool to determine flaws in said phase-shifted masks to be corrected (**Specification, page 13, lines 1-13**).

20. The method of Claim 19 further comprising the steps of:

the facilitator providing information about a particular phase-shifted mask acquired through the use of the stepper simulation tool to a semiconductor manufacturer (**Specification, page 13, lines 1-15**); and

the semiconductor manufacturer adjusting parameters on an actual stepper that is used with the particular phase-shifted mask based on the information (**Specification, page 13, lines 16-21**).

22. The method of Claim 1 further comprising the step of the facilitator purchasing an option from a mask maker that commits the mask maker to perform a certain volume of future work for the facilitator (**Specification, page 16, lines 1-7**); and

wherein the step of causing a set of one or more mask makers to manufacture said phase-shifted masks includes said facilitator exercising said option (**Specification, page 16, lines 1-7**).

23. (The method of Claim 1 wherein:  
the compensation for said subsidies is based on the number of semiconductors produced by said phase-shifted masks (**Specification, page 9, lines 24-25**); and  
the method further comprises the steps of using a counter installed on stepper equipment to determine the compensation (**Specification, page 18, lines 15-21**).

24. The method of Claim 1 wherein:  
the compensation for said subsidies is based on the number of semiconductors produced by said phase-shifted masks (**Specification, page 9, lines 24-25**); and  
the method further comprises the steps of placing a counter device on at least one of the phase-shifted masks to determine the compensation (**Specification, page 18, lines 22-26**).

28. A method of manufacturing masks using a particular technology when said particular technology is preferable to but cost more than one or more alternative technologies, the method comprising the steps of:

providing, from a facilitator on behalf of a set of one or more parties that desire masks, subsidies for production of masks using said particular technology (**Specification, page 5, lines 3-4; page 7, lines 11-15; page 10, lines 13-15**) (**FIG. 3, semiconductor manufacturers 302, facilitator 310; FIG. 4,**

semiconductor manufacturer 304, mask maker 314, reduced mask cost (1));

paying for manufacture of said masks using compensation that includes said subsidies from said facilitator (Specification, page 5, lines 4-6; page 7, lines 15-18; page 10, lines 19-20)(FIG. 4, total mask cost (2));

manufacturing said masks using said particular technology for said compensation, said manufacturing being performed by a set of one or more mask makers (Specification, page 5, lines 6-7; page 11, lines 1-2)(FIG. 3, mask makers 312; FIG. 4, mask maker 314, improved technology mask (4)); and

receiving, by said facilitator from said set of one or more parties, compensation for said subsidies based on one or more factors including a factor that reflects market success of integrated circuits produced using said masks (Specification, page 5, lines 7-9; page 9, lines 12-17; page 11, lines 2-6)(FIG. 3, facilitator 310, semiconductor manufacturers 302; FIG. 4, facilitator 310, semiconductor manufacturer 304, integrated circuits (%), 100% revenue (6), X% revenue (7)).

29. The method of Claim 28 wherein, for a particular party in said set of one or more parties,

the facilitator agrees to provide subsidies for production of masks for a defined population of designs (Specification, page 17, lines 5-21); and

the particular party agrees to compensate the facilitator for the subsidies based on a factor that reflects market success of each and every integrated circuit produced by or for said particular party based on any design in said defined

population of designs (**Specification, page 9, line 24 to page 10, line 2**).

31. The method of Claim 28 wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator based on number of integrated circuits manufactured using a mask that was subsidized by the facilitator (**Specification, page 9, line 24 to page 10, line 2**).

32. The method of Claim 28 wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator for rental of a mask that was subsidized by the facilitator (**Specification, page 9, lines 18-23**).

33. The method of Claim 28 wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator based on revenues derived from integrated circuits manufactured using a mask that was subsidized by the facilitator (**Specification, page 9, lines 14-17**).

34. The method of Claim 33 wherein the party pays the facilitator a per-unit amount that decreases with increased volume of sales of integrated circuits manufactured using said mask (**Specification, page 10, lines 3-8**).

38. The method of Claim 28 further comprising the step of the facilitator certifying mask makers that satisfy certain



quality criteria (**Specification, page 11, line 13 to page 12, line 4**).

41. The method of Claim 40 further comprising the step of the facilitator determining which mask makers to certify based on said information (**Specification, page 11, line 13 to page 12, line 4**).

46. The method of Claim 28 further including the facilitator using a stepper simulation tool to determine flaws in said masks to be corrected (**Specification, page 13, lines 1-13**).

47. The method of Claim 46 further comprising the steps of:

the facilitator providing information about a particular mask acquired through the use of the stepper simulation tool to a semiconductor manufacturer (**Specification, page 13, lines 1-15**); and

the semiconductor manufacturer adjusting parameters on an actual stepper that is used with the particular mask based on the information (**Specification, page 13, lines 16-21**).

49. The method of Claim 28 further comprising the step of the facilitator purchasing an option from a mask maker that commits the mask maker to perform a certain volume of future work for the facilitator (**Specification, page 16, lines 1-7**); and

wherein the step of causing a set of one or more mask makers to manufacture said masks includes said facilitator exercising said option (**Specification, page 16, lines 1-7**).

50. The method of Claim 28 wherein:

the compensation for said subsidies is based on the number of semiconductors produced by said masks **(Specification, page 9, lines 24-25)**; and

the method further comprises the steps of using a counter installed on stepper equipment to determine the compensation **(Specification, page 18, lines 15-21)**.

51. The method of Claim 28 wherein:

the compensation for said subsidies is based on the number of semiconductors produced by said masks **(Specification, page 9, lines 24-25)**; and

the method further comprises the steps of placing a counter device on at least one of the masks to determine the compensation **(Specification, page 18, lines 22-26)**.

53. A method of manufacturing products using a particular technology when said particular technology is preferable to but cost more than one or more alternative technologies, the method comprising the steps of:

providing, from a facilitator on behalf of a set of one or more parties, subsidies for using said particular technology to manufacture products **(Specification, page 5, lines 3-4; page 7, lines 11-15; page 10, lines 13-15) (FIG. 3, semiconductor manufacturers 302, facilitator 310; FIG. 4, semiconductor manufacturer 304, mask maker 314, reduced mask cost (1))**;

paying for manufacture of said products using compensation that includes said subsidies from said

facilitator (Specification, page 5, lines 4-6; page 7, lines 15-18; page 10, lines 19-20) (FIG. 4, total mask cost (2));

manufacturing products for said compensation using said particular technology (Specification, page 5, lines 6-7; page 11, lines 1-2) (FIG. 3, mask makers 312; FIG. 4, mask maker 314, improved technology mask (4)); and

receiving, by said facilitator from said set of one or more parties, compensation for said subsidies based on one or more factors including a factor that reflects market success of said products (Specification, page 5, lines 7-9; page 9, lines 12-17; page 11, lines 2-6) (FIG. 3, facilitator 310, semiconductor manufacturers 302; FIG. 4, facilitator 310, semiconductor manufacturer 304, integrated circuits (%), 100% revenue (6), X% revenue (7)).

54. The method of Claim 53 wherein, for a particular party in said set of one or more parties,

the facilitator agrees to provide subsidies for production of products for a defined population of designs (Specification, page 17, lines 5-21); and

the particular party agrees to compensate the facilitator for the subsidies based on a factor that reflects market success of each and every article of manufacture produced by or for said particular party based on any design in said defined population of designs (Specification, page 9, line 24 to page 10, line 2).

56. The method of Claim 53 wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator based on number of articles of manufacture manufactured using a product that was

subsidized by the facilitator (**Specification, page 9, line 24 to page 10, line 2**).

57. The method of Claim 53 wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator for rental of a product that was subsidized by the facilitator (**Specification, page 9, lines 18-23**).

58. The method of Claim 53 wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator based on revenues derived from articles of manufacture manufactured using a product that was subsidized by the facilitator (**Specification, page 9, lines 14-17**).

59. The method of Claim 58 wherein the party pays the facilitator a per-unit amount that decreases with increased volume of sales of articles of manufacture manufactured using said product (**Specification, page 10, lines 3-8**).

63. The method of Claim 53 further comprising the step of the facilitator certifying product makers that satisfy certain quality criteria (**Specification, page 11, line 13 to page 12, line 4**).

66. The method of Claim 65 further comprising the step of the facilitator determining which product makers to certify based on said information (**Specification, page 11, line 13 to page 12, line 4**).

70. (Original) The method of Claim 53 further comprising the step of the facilitator purchasing an option from a product maker that commits the product maker to perform a certain volume of future work for the facilitator **(Specification, page 16, lines 1-7)**; and

wherein the step of causing a set of one or more product makers to manufacture said products includes said facilitator exercising said option **(Specification, page 16, lines 1-7)**.

## ARGUMENTS

A. Claims 1-25 and 28-71 are patentable under 35 U.S.C. 103(a) over "National Security And The Semiconductor Industry" (Dallmeyer)

### 1. Dallmeyer: Overview

Dallmeyer criticizes Sematech, the industry consortium intended to restore U.S. competitiveness in the early 1990s with partial DOD funding. Section, "Real Problems, Wrong Answers", 1<sup>st</sup> and 2<sup>nd</sup> paragraphs. Thirteen chip producers, e.g. AMD, Digital, HP, IBM, National Semiconductor, and TI, agreed to participate subject to government funding and approval by company management. Section, "Sematech: The Main Act", 3<sup>rd</sup> paragraph. The Semiconductor Industry Association (SIA) rejected the option of Sematech manufacturing commercial quantities of chip. Section, "Sematech: The Main Act", 5<sup>th</sup> paragraph. Thus, chips produced by Sematech would be used only in testing and quality control - none would be sold. Section, "Sematech: The Main Act", 5<sup>th</sup> paragraph.

Dallmeyer believes that by partially funding Sematech the DOD would be repeating earlier government mistakes in protecting declining domestic industries. Section, "Real Problems, Wrong Answers", 2<sup>nd</sup> paragraph. Dallmeyer further believes that Sematech would encourage the foreign competition to manufacture products that are more advanced and more lucrative. Section, "Real Problems, Wrong Answers", 6<sup>th</sup> paragraph. Dallmeyer yet further believes that Sematech could easily metamorphose into yet another captive defense industry with a voracious appetite for increasing appropriations.

Section, "Real Problems, Wrong Answers", 10<sup>th</sup> paragraph. For these and other reasons, Dallmeyer concludes that there may be cheaper, more efficient ways to stimulate civilian R&D than the Sematech consortium. Section, "Facing the Long Term".

2. Applicants' limitations recited in Claims 1-25 and 28-71 are not taught by Dallmeyer.

Claims 1, 28, and 53

Claim 1 recites in part:

receiving, by said facilitator from said set of one or more parties, compensation for said subsidies based on one or more factors including a factor that reflects market success of integrated circuits produced using said phase-shifted masks.

Claim 28 recites in part:

receiving, by said facilitator from said set of one or more parties, compensation for said subsidies based on one or more factors including a factor that reflects market success of integrated circuits produced using said masks.

Claim 53 recites in part:

receiving, by said facilitator from said set of one or more parties, compensation for said subsidies based on one or more factors including a factor that reflects market success of said products.

Applicants respectfully submit that Dallmeyer fails to disclose or suggest these limitations. Specifically, Applicants respectfully submit that Dallmeyer fails to teach a facilitator that receives compensation for subsidies as well as the compensation for the subsidies being based on factors including market success. The recited steps advantageously allow mask makers, the mask requesters, as well as the

facilitator to benefit financially from using a developing technology, such as phase-shifting technology.

The Final Office Action cites Dallmeyer at page 2, lines 44-46 (shown below) as teaching providing subsidies.

The same issues that arose in the Fujitsu-Fairchild case underlie the industry's proposal that the government subsidize Sematech, a new consortium intended to restore U.S. competitiveness by the early 1990s.

The Final Office Action admits that Dallmeyer does not teach integrated circuits or a facilitator that receives compensation for the subsidies based on market success. The Final Office Action then concludes (without providing any support) that a facilitator would be inherent and that it would be obvious to tie the subsidies into market factors (e.g. price).

Applicants traverse this conclusion. As taught by Dallmeyer, Section "Sematech: The Main Act", 3<sup>rd</sup> paragraph (shown below):

Consortium members will supply money and staff to Sematech in exchange for access to the resulting manufacturing technology. To fund the venture, the SIA is seeking \$125 million annually from industry and a matching amount from the federal government, primarily DOD, for six years.

As further taught by Dallmeyer, Section "Sematech: The Main Act", 5<sup>th</sup> paragraph (shown below):

Although a high-volume production line is the best way to test manufacturing techniques and drive down costs, Sematech will combine a medium-scale plant with elaborate software programs. These would give manufacturers the flexibility needed to produce complex and customized chips. The SIA rejected the option of having Sematech manufacture commercial quantities. The decision for small volume was



reportedly a concession to obtain IBM's support of the project. IBM feared it would be pressured into buying Sematech's chips, even if other chips of better quality or lower cost were available. Chips coming off the production line will be sued only in testing and quality control - none will be sold.

Therefore, the Semantech process is distinguished from Applicants' recited methods. Because Dallmeyer fails to disclose or suggest receiving, by said facilitator from the party/parties, compensation for the subsidies based on one or more factors including a factor that reflects market success of integrated circuits/products, Applicants request reconsideration and withdrawal of the rejection of Claims 1, 28, and 53.

Claims 2-25, 29-52, 54-71

Claims 2-25 depend from Claim 1 and therefore are patentable for at least the reasons presented for Claim 1. Claims 29-52 depend from Claim 28 and therefore are patentable for at least the reasons presented for Claim 28. Claims 54-71 depend from Claim 53 and therefore are patentable for at least the reasons presented for Claim 53. Based on those reasons, Applicants request reconsideration and withdrawal of the rejection of Claims 2-25, 29-52, and 54-71.

Claims 2, 29, and 54

Moreover, Claims 2, 29, and 54 recite in part:

the particular party agrees to compensate the facilitator for the subsidies based on a factor that reflects market success of each and every integrated circuit produced by or for said particular party based on any design in said defined population of designs.

Dallmeyer teaches nothing about the parties (e.g. members of the consortium) compensating the facilitator (e.g. the DOD), much less compensating based on a factor reflecting the market success of each integrated circuit produced by or for the parties. Therefore, Applicants request further reconsideration and withdrawal of the rejection of Claims 2, 29, and 54.

Claims 4, 31, and 56

Moreover, Claim 4 recites, "wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator based on number of integrated circuits manufactured using a phase-shifted mask that was subsidized by the facilitator"; Claim 31 recites, "wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator based on number of integrated circuits manufactured using a mask that was subsidized by the facilitator"; and Claim 56 recites, "wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator based on number of articles of manufacture manufactured using a product that was subsidized by the facilitator". Dallmeyer teaches nothing about a party (e.g. a consortium member) compensating the DOD based on the number of ICs/articles of manufacture manufactured using the phase-shifted mask/mask/product. Therefore, Applicants request further reconsideration and withdrawal of the rejection of Claims 4, 31, and 56.

Claims 5, 32, and 57

Moreover, Claim 5 recites, "wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator for rental of a phase-shifted mask that was subsidized by the facilitator"; Claim 32 recites, "wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator for rental of a mask that was subsidized by the facilitator"; and Claim 57 recites, "wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator for rental of a product that was subsidized by the facilitator". Dallmeyer teaches nothing about a party (e.g. a consortium member) paying the facilitator (e.g. the DOD) for a rental of a phase-shifted mask/mask/product that was subsidized. Therefore, Applicants request further reconsideration and withdrawal of the rejection of Claims 5, 32, and 57.

Claims 6, 33, and 58

Moreover, Claim 6 recites, "wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator based on revenues derived from integrated circuits manufactured using a phase-shifted mask that was subsidized by the facilitator"; Claim 33 recites, "wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator based on revenues derived from integrated circuits manufactured using a mask that was subsidized by the facilitator"; and Claim 58 recites, "wherein the step of compensating the facilitator includes a party from said set of one or more parties paying the facilitator based on revenues derived from articles of manufacture manufactured using a

product that was subsidized by the facilitator". Dallmeyer teaches nothing about a party (e.g. a consortium member) paying the facilitator (e.g. the DOD) based on revenues. Therefore, Applicants request further reconsideration and withdrawal of the rejection of Claims 6, 33, and 58.

Claims 7, 34, and 59

Moreover, Claim 7 recites, "wherein the party pays the facilitator a per-unit amount that decreases with increased volume of sales of integrated circuits manufactured using said phase-shifted mask"; Claim 34 recites, "wherein the party pays the facilitator a per-unit amount that decreases with increased volume of sales of integrated circuits manufactured using said mask"; and Claim 59 recites, "wherein the party pays the facilitator a per-unit amount that decreases with increased volume of sales of articles of manufacture manufactured using said product". Dallmeyer teaches nothing about a party (e.g. a consortium member) paying the facilitator (e.g. the DOD) based on a per-unit amount that decreases with increased volume of sales. Therefore, Applicants request further reconsideration and withdrawal of the rejection of Claims 7, 34, and 59.

Claims 11, 14, 38, 41, 63, and 66

Moreover, Claim 11 recites, "the facilitator certifying mask makers that satisfy certain quality criteria"; Claim 14 recites, "the facilitator determining which mask makers to certify based on said information"; Claim 38 recites, "the facilitator certifying mask makers that satisfy certain quality criteria"; Claim 41 recites, "the facilitator determining which mask makers to certify based on said

information"; Claim 63 recites, "the facilitator certifying product makers that satisfy certain quality criteria"; and Claim 66 recites, "the facilitator determining which product makers to certify based on said information". Dallmeyer teaches nothing about a facilitator certifying a mask makers/product makers. Therefore, Applicants request further reconsideration and withdrawal of the rejection of Claims 11, 14, 38, 41, 63, and 66.

Claims 19 and 46

Moreover, Claims 19 and 46 recite, "the facilitator using a stepper simulation tool to determine flaws in said phase-shifted masks to be corrected". Dallmeyer teaches nothing about using a stepper simulation tool in this manner. Therefore, Applicants request further reconsideration and withdrawal of the rejection of Claims 19 and 46.

Claims 20 and 47

Moreover, Claim 20 recites, "the facilitator providing information about a particular phase-shifted mask acquired through the use of the stepper simulation tool to a semiconductor manufacturer; and the semiconductor manufacturer adjusting parameters on an actual stepper that is used with the particular phase-shifted mask based on the information". Claim 47 recites, "the facilitator providing information about a particular mask acquired through the use of the stepper simulation tool to a semiconductor manufacturer; and the semiconductor manufacturer adjusting parameters on an actual stepper that is used with the particular mask based on the information". Dallmeyer teaches nothing about using a stepper simulation tool in this manner and then adjusting parameters

on the stepper. Therefore, Applicants request further reconsideration and withdrawal of the rejection of Claims 20 and 47.

Claims 22, 49, and 70

Moreover, Claim 22 recites, "the facilitator purchasing an option from a mask maker that commits the mask maker to perform a certain volume of future work for the facilitator; and ... said facilitator exercising said option"; Claim 49 recites, "the facilitator purchasing an option from a mask maker that commits the mask maker to perform a certain volume of future work for the facilitator; and ... said facilitator exercising said option"; and Claim 70 recites, "the facilitator purchasing an option from a product maker that commits the product maker to perform a certain volume of future work for the facilitator; and ... said facilitator exercising said option". Dallmeyer teaches nothing about a facilitator purchasing and exercising an option. Therefore, Applicants request further reconsideration and withdrawal of the rejection of Claims 22, 49, and 70.

Claims 23, 24, 50, and 51

Claims 23, 24, 50, and 51 recite using a counter/counter device on the stepper equipment/phase-shifted mask/mask to determine the compensation for the subsidies. Dallmeyer teach nothing about using a counter/counter device to determine compensation for a subsidy. Therefore, Applicants request further reconsideration and withdrawal of the rejection of Claims 23, 24, 50, and 51.

B. The Examiner has failed to present a prima facie case of obviousness. Specifically, the Examiner has relied on hindsight to reject the claims.

The Final Office Action admits that Dallmeyer fails to teach a facilitator that receives compensation for subsidies as well as the compensation for subsidies being based on factors including market success. To make up for these deficiencies and other deficiencies, e.g. other limitations in the dependent claims (noted above), the Final Office Action repeatedly states that the recited limitations are "inherent" or "obvious to one of ordinary skill in the art". Notably, no other reference is cited to support the Examiner's bald assertion of inherency/obviousness.

The Final Office Action (e.g. on page 6, Response to Arguments) repeats that Dallmeyer does not disclose all limitations. The Final Office Action then states that Applicant "does not argue against the examiner's rationale for making the limitations not found obvious". Applicants disagree.

In fact, Applicants have repeatedly emphasized the lack of rationale in the Examiner's arguments. For example, in the "Amendment In Response To Second Office Action" dated August 15, 2006, Applicants provided citations in Dallmeyer that clearly teach a different process than that recited in the claims, thereby demonstrating the lack of inherency or obviousness to use Dallmeyer to teach Applicants' recited methods. See, e.g. pages 30-31. Applicants further argued in this same paper that the lack of support in Dallmeyer for the claim rejections actually reflects the Examiner's use of

hindsight, which cannot be used in the rejection of the claims. See, page 37.

As succinctly stated by the Federal Circuit, the "prior art must suggest to one of ordinary skill in the art the desirability of the claimed combination". *Fromsom v. Advance Offset Plate, Inc.*, 755 F.2d 1549, 1556 (Fed.Cir. 1985). Moreover, as also stated by the Federal Circuit, even "when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference". *In re Kotzab*, 217 F.3d 1365, 1370 (Fed.Cir. 2000).

Applicants submit that the Examiner has used the claimed invention as a blueprint for fabricating the allegedly "inherent" or "obvious" elements to defeat the patentability of the claimed invention. That is, Dallmeyer teaches nothing about the facilitator receiving compensation for subsidies or compensation for subsidies being based on factors including a factor that reflects market success. Thus, Dallmeyer provides no suggestion or motivation to modify its teachings in the manner recited in Applicants' claims.

The Examiner has cited no other references in the Final Office Action. Therefore, the only way to modify the teaching of Dallmeyer in the manner recited in Applicants' claims is by using hindsight, which cannot be used to reject the claims.



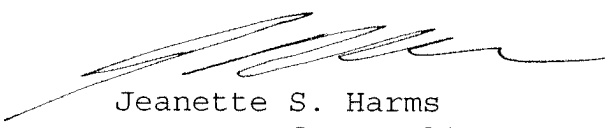
CONCLUSION

Claims 1-25 and 28-71 are pending in the present application. Allowance of these claims is respectfully requested.

If there are any questions, please telephone the undersigned at 408-451-5907 to expedite prosecution of this case.

Respectfully submitted,

Customer No.: 29477



Jeanette S. Harms  
Attorney for Applicants  
Reg. No. 35,537

Telephone: 408-451-5907

Facsimile: 408-451-5908